


Date: Thursday, 9/11/2008 8:36:46 AM  
 User: Chantal Lavoie

## Process Sheet

<b>Customer</b> :	CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> :	SADDLE BILLET (6061)
<b>Job Number</b> :	41961		
<b>Estimate Number</b> :	11985		
<b>P.O. Number</b> :		<b>Part Number</b> :	D6102005
<b>This Issue</b> :	9/11/2008	<b>S.O. No.</b> :	
<b>Prsht Rev.</b> :	NC	<b>Drawing Number</b> :	D6102 REV D
<b>First Issue</b> :	/ /	<b>Project Number</b> :	N/A
<b>Previous Run</b> :	33680	<b>Drawing Revision</b> :	D
<b>Written By</b> :		<b>Material</b> :	
<b>Checked &amp; Approved By</b> :		<b>Due Date</b> :	9/26/2008
<b>Comment</b> :	Est. B01.10.11 Changed Measurement of Material and Added Inspection Level 21 SM		

Qty: 12.24 Um: Each

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
----------------	------------------------------	----------------------

1.0	PG	PURCHASING
-----	----	------------



Comment: Issue P/O: 7144

- a) Description: Alluminum billet  
 b) 47.85" x 15.25" x 1.0" thick  
 c) Tolerance on all dimensions are +0.006"/-0.000"  
 d) Grain direction along 47.85" length  
 e) Material: 6061-T6/T651 (QQ-A-250/11) or (QQ-A-200/8)  
 Material certification required

C 208/09/11

(22)

2.0	D6102005P	Billet 1X15.25X48"
-----	-----------	--------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)  
 Billet 1X15.25X48"

3.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1  
 Receive & Inspect For Transit Damage  
 Ensure material certification is attached

R 08/09/09

(12)

4.0	QC6	DIMENSIONAL CHECK
-----	-----	-------------------



Comment: DIMENSIONAL CHECK  
 Check certification to Dwg D6102 for compliance

S 08/10/09 (X12)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 9/11/2008 8:36:46 AM  
User: Chantal Lavoie

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE BILLET (6061)

Job Number: 41961

Part Number: D6102005

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

*PC 8/10/08*

6.0

QC21

FINAL INSPECTION/W/O RELEASE



*08/10/08*

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



*u 08.10.08*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

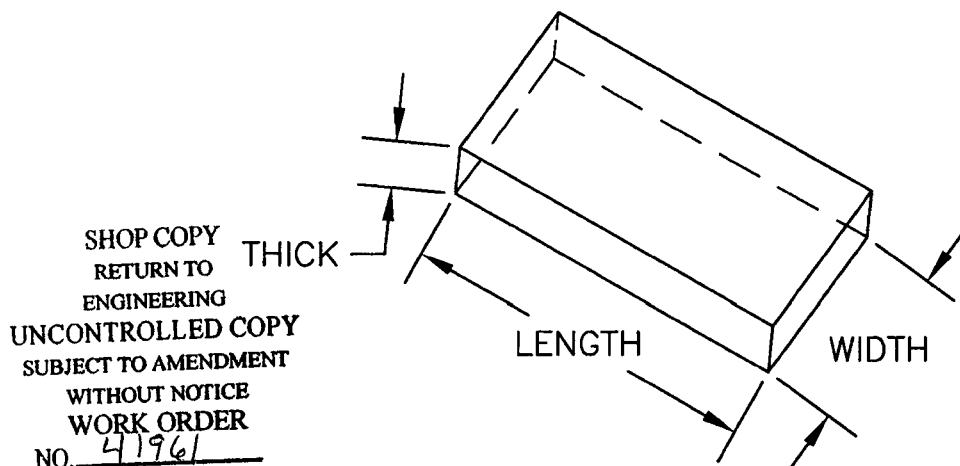
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



DESIGN #	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED CP	APPROVED #	DRAWING NO. D6102	Rev. D SHEET 1 OF 1
DATE 06.06.30		TITLE SADDLE BILLET, 6061	SCALE NTS
A	01.03.30	NEW ISSUE	
B	03.10.20	ADD D6102-005/-007/-009	
C	04.08.25	ADD D6102-010/-011	
D	06.06.30	ADD D6102-013	

## SPECIFICATION CONTROL DRAWING



RELEASED

06.08.15 #

PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.06/-0.00), AND GRAIN DIRECTION AS SHOWN.

TOLERANCE ON ALL DIMENSIONS IS +0.06/-0.00.

ALL DIMENSIONS ARE IN INCHES.

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6102-001	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	7.880	6.250	2.000	Along 7.880 Length
D6102-003	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	6.000	6.250	2.000	Along 6.000 Length
D6102-005	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	47.85	15.250	1.000	Along 47.85 Length
D6102-007	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	7.500	7.000	2.500	Along 7.500 Length
D6102-009	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	11.000	6.000	5.000	Along 11.000 Length
D6102-010	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	7.950	8.250	2.500	Along 7.950 Length
D6102-011	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	6.500	8.250	2.500	Along 6.500 Length
D6102-013	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	6.500	7.000	2.000	Along 6.500 Length

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# TEST CERTIFICATE



Hulamin Limited Reg. No. 1940/013924/06 VAT Reg. No. 4080143804  
 HEAD OFFICE: Moses Mabhida Rd, Pietermaritzburg 3201, P.O. Box 74, Pietermaritzburg 3, South Africa  
 Telephone: +27 33 395 8911 Telefax: +27 33 394 6535

<b>BUYER:</b> EMPIRE RESOURCES INC 10 th FLOOR 1 PARKER PLAZA FORT LEE	<b>Shipping File No :</b> UR33933 <b>Lot No :</b> 17/03/514T4 <b>P/List No :</b> 2/643133 <b>Release No :</b>	<b>Product :</b> 1" X 48.5" X 144.5" PLATE 6061, T651 <b>Dimension :</b> 1" X 48.5" X 144.5" <b>Alloy - Temper :</b> 6061 - T651
	<b>Cust Order No :</b> 3715-P.R127690 <b>HULAMIN Order No :</b> 035098E <b>Item Part :</b> 1/1	<b>Certificate No :</b> 0803LB5242 <b>Cust Ref/Part No :</b> <b>Combined P/List No :</b>
	Case No : 01-84905	

## MECHANICAL TEST RESULTS

Lot No.	Cast No.	Metal Id	Alloy	Spec No	Mechanical Properties						
					Yield Strength (Ksi)	UTS (Ksi)	Elongation A50 (%)	Earing (%)	Test Date	Gauge Length (Inches)	Bend Test
Spec				Min Max	35.1 42.0	42.0	10				
17/03/514T4	SEFE	15190085	6061	1	36.1	46.3	13		12/03/08	02	
				2	36.0	46.0	13		12/03/08	02	

## CHEMICAL COMPOSITION

	Cast No.	Alloy	Si (%)	Fe (%)	Cu (%)	Mn (%)	Mg (%)	Cr (%)	Zn (%)	Ti (%)	Each (%)	Total (%)
Min			0.40		0.15		0.8	0.04				
Max			0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15
	SEFE	6061	0.67	0.43	0.28	0.11	1.03	0.19	0.03	0.01		

CONFORMS TO: AMS/99-A-250/11, ASTM B209-96, ASME SB-209 AND AMS 4027M

WE HEREBY CERTIFY, THAT THE MATERIAL DESCRIBED ABOVE HAS BEEN TESTED AND COMPLIES WITH THE TERMS OF THE ORDER CONTRACT. THE INSPECTION RESULTS INDICATED IN THE CHEMICAL COMPOSITION HAVE BEEN OBTAINED FROM CAST ANALYSIS.

Dr. A. Pitchford (HEAD OF CHEMICAL TESTING)

Ver 2.2.8

V. Maniram (HEAD OF PHYSICAL TESTING)

APPROVED BY  
 04/11/08  
 04/11/08  
 04/11/08